

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SAN FRANCISCO BAY REGION

ORDER NO. 80-2

NPDES PERMIT NO. CA0038351

REISSUING WASTE DISCHARGE REQUIREMENTS FOR:

BAY FARM ISLAND  
RECLAMATION DISTRICT NO. 2105  
HARBOR BAY ISLE LAGOONS  
ALAMEDA, ALAMEDA COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region, (hereinafter Board) finds that:

1. Bay Farm Island Reclamation District No. 2105, hereafter discharger, submitted a report of waste discharge (NPDES Short Form A) dated September 27, 1979, for reissuance of its NPDES Permit (Order No. 75-15 adopted March 18, 1975 as amended by Order No. 77-70 adopted June 21, 1977). The existing NPDES Permit expires March 1, 1980. The existing Permit allows discharge to San Francisco Bay.
2. The discharger proposes to discharge wastes containing pollutants into San Francisco Bay, a water of the United States, at three points.

Waste 001 is approximately 9.5 mgd of lagoon water and surface drainage from land adjacent to the lagoon. The waste would be discharged from the north Lagoon Structure to San Leandro Channel at the northeast corner of the District's boundary line. During dry weather the waste would consist primarily of lagoon water from a Bay water intake structure on the west shoreline of the District. During wet weather, the discharge would also contain runoff.

Waste 002 is lagoon water and storm runoff water from the west lagoon structure on the Bay shoreline. Discharge would be made from the west lagoon structure to San Francisco Bay only during wet weather, at an average rate of 5 mgd. During dry weather, the structure would be used to take water into the lagoon.

Waste 003 is approximately 4 mgd of lagoon water and surface drainage from land adjacent to the proposed southwest lagoon. The waste would be discharged to San Francisco Bay from a south lagoon structure, near the south corner of the District's boundary. This waste discharge would be similar to Waste 001. The lagoon system for Waste 003 may be built within the next five years.

3. The lagoon water will have limited and controlled exchange with San Francisco Bay, and is therefore subject to the creation of nuisance and unusually dense biological growths. Its release or pumping into the Bay constitutes a "discharge of pollutants" as defined in Section 502 of the Federal Water Pollution Control Act Amendments of 1972.
4. Harbor Bay Isle Lagoons, San Leandro Channel, and San Francisco Bay are waters of the State.
5. The Board adopted a Water Quality Control Plan for San Francisco Bay Basin in April 1975. The Basin Plan contains water quality objectives for the Harbor Bay Isle Lagoons, San Leandro Channel, and San Francisco Bay.
6. The beneficial uses of the Harbor Bay Isle Lagoons are:
  - a. Recreation
  - b. Fish habitat
  - c. Habitat and resting for waterfowl and migratory birds
  - d. Esthetic enjoyment
7. The beneficial uses of San Francisco Bay and contiguous waters are:
  - a. Recreation
  - b. Fish migration, habitat, and spawning
  - c. Habitat and resting for waterfowl and migratory birds
  - d. Industrial water supply
  - e. Esthetic enjoyment
  - f. Navigation
  - g. Commercial fishing
  - h. Shellfishing
8. Effluent limitation and toxic effluent standards established pursuant to Sections 208(b), 301, 304, and 307 of the Federal Water Pollution Control Act and amendments thereto are applicable to the discharge.
9. This project is exempt from the provisions of Chapter 3 (commencing with Section 21100) of Division 13 of the Public Resources Code (CEQA) pursuant to Section 13389 of the California Water Code.
10. The Board has notified the discharger and interested agencies and persons of its intent to reissue waste discharge requirements for the discharge and has provided them with an opportunity for a public hearing and an opportunity to submit their written views and recommendations.
11. The Board, in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED, Bay Farm Island Reclamation District No. 2105, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder and the provisions of the Federal Water Pollution Control Act, and regulations and guidelines adopted thereunder, shall comply with the following:

A. Discharge Prohibitions

1. The discharge of any municipal or industrial waste to the Harbor Bay Isle Lagoons is prohibited. The prohibition does not apply for urban stormwater runoff or an application of algicide or herbicide that has been previously approved by this Board's Executive Officer.
2. The application of copper or other conservative toxicants within the lagoon system to control growth of algae or aquatic plants is prohibited.

B. Effluent Limitations

1. The discharge of Wastes 001, 002, or 003 containing constituents in excess of the following limits is prohibited:

<u>Constituents</u>	<u>Units</u>	<u>Instantaneous Maximum</u>
BOD <sub>5</sub>	mg/l	20
Oil and Grease	mg/l	15

2. Instantaneous maximum limitations shall be applied to the values of the measurements obtained for any single grab sample.

C. Lagoon Water Limitations

1. The discharger shall provide sufficient circulation through the lagoon to maintain the following limits of quality:
  - a. Chlorophyll 'a' - less than 50 µg/l increase above influent concentration;
  - b. Dissolved oxygen - 5.0 mg/l, minimum;
  - c. Total coliform organisms - 240 MPN/100 ml, median of five consecutive samples, maximum;  
- 1000 MPN/100 ml, any single sample, maximum.
2. The discharger shall provide sufficient circulation through the lagoon to prevent the following conditions at any point in the lagoon:

- a. Visible, floating, suspended, or deposited oil or other products of petroleum origin;
- b. Floating, suspended, or deposited macroscopic particulate matter or foam;
- c. Aquatic growths in quantities sufficient to create a nuisance condition as defined in the California Water Code;
- d. Significant increase in apparent color beyond natural background levels;
- e. Increased turbidity above present natural background levels in San Francisco Bay by more than the following:

<u>San Francisco Bay Background</u>	<u>Incremental Increase</u>
< 50 units (JTU)	5 units, maximum
50-100 units	10 units, maximum
>100 units	10% of background, maximum

- f. Toxic or other deleterious substances to be present in concentrations or quantities which will cause deleterious effects on wildlife, or waterfowl, or which render any of these unfit for human consumption either at levels created in the receiving waters or as a result of biological concentration.

D. Receiving Water Limitations

1. The discharge of lagoon water to San Francisco Bay or San Leandro Channel shall not cause:

- a. Visible, floating, suspended, or deposited oil or other products of petroleum origin at any place;
- b. Floating, suspended, or deposited macroscopic particulate matter or foam at any place;
- c. Increased turbidity above background levels at any place by more than the following:

<u>Receiving Water Background</u>	<u>Incremental Increase</u>
< 50 units (JTU)	5 units, maximum
50-100 units	10 units, maximum
>100 units	10% of background, maximum

2. The discharge shall not cause a violation of any applicable water quality standard for receiving waters adopted by the Board or the State Water Resources Control Board as required by the Federal Water Pollution Control Act and regulations adopted thereunder. If more stringent applicable water quality standards are promulgated or approved pursuant to Section 303 of the Federal Water Pollution Control Act, or amendments thereto, the Board will revise and modify this Order in accordance with such more stringent standards.

E. Provisions

1. Neither the treatment nor the discharge of pollutants shall create a nuisance as defined in the California Water Code.
2. The requirements prescribed by this Order supersede the requirements prescribed by Order No. 75-15, adopted March 18, 1975 and as amended by Order No. 77-70, adopted June 21, 1977. Order Nos. 75-15 and 77-70 are hereby rescinded.
3. The discharger shall comply with all effluent, lagoon, and receiving water limitations, prohibitions, and provisions of this order immediately upon adoption.
4. The discharger shall comply with the attached Self-Monitoring and Reporting Program as ordered by the Executive Officer.
5. The discharger shall comply with all items of the attached "Standard Provisions and Reporting Requirements," dated April 1977, except A.5, A.12, A.16, B.2, B.3, and B.5.
6. The Board expects the discharger to operate and maintain the lagoons without chemical treatment (i.e. herbicides and algaecides) and to implement all feasible measures prior to using chemical treatment. If chemical treatment is proposed by the discharger, then at least 30 days prior to any intended application of algicide or herbicide to the lagoon, the discharger shall submit to the Executive Officer a request describing:
  - a. Why chemical treatment is proposed over other methods;
  - b. The nature of the material to be applied;
  - c. The proposed times, locations, and dosages for the application;
  - d. Proposed steps to be taken for preventing adverse effects upon the fish, wildlife, waterfowl and other aquatic organisms in the lagoon.

At least 24 hours prior to any intended application of such material, the discharger shall notify this office. Such notification shall be followed by a written report within five working days, describing:

- a. Times, locations, and dosages for the application,
- b. Steps taken to prevent adverse effects upon the fish, wildlife, waterfowl and other aquatic organisms in the lagoon.

Application of any algaecide or herbicide to the lagoon without written authorization from the Executive Officer is prohibited.

7. The discharger shall submit a Lagoon Operations and Maintenance Manual satisfactory to the Executive Officer by May 1, 1980. The Manual shall as a minimum include detailed procedures for both normal and abnormal operations; personnel qualifications and responsibilities; control procedures; etc.
8. This Order expires January 15, 1985. The discharger must file a report of waste discharge in accordance with Title 23, Chapter 3, Subchapter 9 of the California Administrative Code, not later than 180 days in advance of such expiration date as application for issuance of new waste discharge requirements.
9. This Order shall serve as a National Pollutant Discharge Elimination System permit pursuant to Section 402 of the Federal Water Pollution Control Act or amendments thereto, and shall become effective ten (10) days after date of its adoption provided the Regional Administrator, Environmental Protection Agency, has no objection. If the Regional Administrator objects to its issuance, the permit shall not become effective until such objection is withdrawn.

I, Fred H. Dierker, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on January 15, 1980.

FRED H. DIERKER  
Executive Officer

Attachments:

Standard Provisions & Reporting  
Requirements, April 1977  
Self-Monitoring Program

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SAN FRANCISCO BAY REGION

T E N T A T I V E    R E V I S E D

SELF-MONITORING PROGRAM  
FOR

*1507 1 APR 1978* RECLAMATION DISTRICT NO. 2105

HARBOR BAY ISLE LAGOONS

ALAMEDA, ALAMEDA COUNTY

NPDES NO. CA 0038351

ORDER NO. 80-2

CONSISTS OF

PART A, dated 1/78

AND

PART B

PART B

I. DESCRIPTION OF SAMPLING STATIONS

A. INTAKE

<u>Station</u>	<u>Description</u>
I-1	At a point in the lagoon, immediately adjacent to the west lagoon structure.

B. EFFLUENT

<u>Station</u>	<u>Description</u>
E-001	At a point in the lagoon, immediately adjacent to the north lagoon structure.
E-002	At a point in the lagoon, immediately adjacent to the west lagoon structure.
E-003	At a point in the lagoon, immediately adjacent to the south lagoon structure.

C. LAGOON WATER

<u>Station</u>	<u>Description</u>
LG-1 thru LG-3	At the approximate center line points in the lagoon shown in the attached sketch entitled "Bay Farm Island Lagoon Sampling Stations."

D. RECEIVING WATERS

<u>Station</u>	<u>Description</u>
C-1	At a point in San Leandro Channel, located approximately 25 feet north of the point at which waste 001 is discharged.
C-1-RW C-1-RE	At one point in San Leandro Channel, 200 feet either westerly or easterly from the north lagoon structure and "upstream" from the lagoon structure depending upon tidal conditions (e.g. C-1-RW on flood and C-1-RE on ebb).
C-2	At a point in San Francisco Bay 25' southwest of the south lagoon structure.
C-2-R	At a point in San Francisco Bay 200 feet northwest of the south lagoon structure.



II. SCHEDULE OF SAMPLING, MEASUREMENTS, AND ANALYSES

- A. The schedule of sampling and analysis shall be that given as Table I. Grab samples of intake shall be collected during periods of maximum peak flows.

III. MODIFICATION OF PART "A" DATED JANUARY 1978

- A. Does not include the following paragraphs of Part A:

C.1, C.3, C.4, C.5.d, C.5.e, D.1, D.2.a, D.3.a,  
D.4, E, F.3.g.

- B. Includes the following modification to paragraph F.3.c:

Effluent data summary will be sent to the Regional  
Board only.

I, Fred H. Dierker, Executive Officer, hereby certify that the foregoing Self-Monitoring Program:

1. Has been developed in accordance with the procedure set forth in this Regional Board's Resolution No. 73-16 in order to obtain data and document compliance with waste discharge requirements established in Regional Board Order No. 80-2.
2. Is effective on the date shown below.
3. May be reviewed at any time subsequent to the effective date upon written notice from the Executive Officer or request from the discharger and revisions will be ordered by the Executive Officer.

FRED H. DIERKER  
Executive Officer

Attachments:

Table I  
Sketch

Effective Date \_\_\_\_\_

TABLE I  
SCHEDULE FOR SAMPLING, MEASUREMENTS, AND ANALYSES  
NPDES NO. CA0038351  
ORDER NO. 80-2

SAMPLING STATIONS	I-1	E-001, 002 & 003(4)	LG (1)	C (2)					
TYPE OF SAMPLES	G	G	G	G					
Flow Rate (mgd)	D	D							
BOD <sub>5</sub> (mg/l)		W							
Oil & Grease (mg/l)		W							
pH (units)	M	W	M (3)						
Chlorophyll 'a' (mg/l)	M		(3) M						
Dissolved Oxygen (mg/l)			M (3)						
Temperature (°C)			(3) M						
Turbidity (Nephelometric Turbidity Units)	W	W	M	M					
Total Coliform (MPN/100 ml)			(3) M						
All Applicable Standard Observations		W	(3) M	M					

FOOTNOTES

- (1) Samples of lagoon water shall be collected on days coincident with sampling of intake water.
- (2) To be sampled while discharge from the lagoon is occurring.
- (3) Weekly from June through September one hour before sunrise.
- (4) E002 shall be sampled only after (or preferably during) rainfall event causing discharge and then only at frequency shown.

LEGEND FOR TABLE

G = grab sample  
I = intake station  
E = waste effluent stations  
C = receiving water stations  
LG = lagoon stations

D = once each day  
W = once each week  
M = once each month